CLAIMS

1. A scroll compressor in which a fixed scroll having a scroll lap and an orbiting scroll having a end plate and a scroll lap are meshed with each other such that the laps of the scrolls come inside, said orbiting scroll turns in a state in which rotation of the orbiting scroll is prevented, a thrust force when the orbiting scroll turns is supported by sliding surfaces between said end plate and said fixed scroll by back pressure force applied to a back surface of said orbiting scroll, wherein

a surface of said fixed scroll opposed to said end plate of said orbiting scroll outside of the scroll lap of said fixed scroll is formed with: a substantially annular seal portion which extends such as to have an outer wall surface outwardly extending from an inner wall surface of outermost periphery of said scroll lap of said fixed scroll along the inner wall surface, and which comes into slide contact with said end plate of said orbiting scroll; a substantially annular recess located outside of said substantially annular seal portion; and a recess which is brought into communication with an intake port of said fixed scroll independently from said substantially annular recess.

2. The scroll compressor according to claim 1, wherein said scroll lap of said fixed scroll is formed of curve which extends from a winding terminal end of said scroll lap of said fixed scroll to a location close to a winding terminal end of said scroll lap of said orbiting scroll, and an inner wall surface of an extension of said curve is continuous with said scroll lap of said fixed scroll.

3. The scroll compressor according to claim 2, wherein said curve which is continuous with said scroll lap of said fixed scroll is the same as a curve which forms said scroll lap of said fixed scroll.

4. The scroll compressor according to claim 1, wherein said

substantially annular seal portion is provided with a thin groove which extends to a location close to a winding terminal end of said scroll lap of said orbiting scroll, and the thin groove is brought into communication with said recess.

5. The scroll compressor according to claim 1, wherein a sealing length between the inner wall surface of said recess and an inner wall surface of said fixed scroll at said substantially annular seal portion, or a sealing length between said thin groove and the inner wall surface of said fixed scroll is t/4 or more and 3t or less when lap thickness of said fixed scroll is defined as "t".

6. The scroll compressor according to claim 5, wherein a sealing length between the inner wall surface of said recess and an inner wall surface of said fixed scroll, or a sealing length between said thin groove and the inner wall surface of said fixed scroll is gradually reduced toward the winding terminal end of said scroll lap of said orbiting scroll.

7. The scroll compressor according to claim 4, wherein a depth of said recess or said thin groove is 0.1mm or more and H/3mm or less when a lap height of said fixed scroll is defined as Hmm.

8. The scroll compressor according to claim 4, wherein the depth of said thin groove is smaller than the depth of said recess.

9. The scroll compressor according to claim 1, wherein said scroll compressor is operated with compression ratio which is smaller than design compression ratio determined by scroll laps of said fixed scroll and orbiting scroll and the like.

10. The scroll compressor according to any one of claims 1 to 9, wherein high pressure refrigerant, e.g., carbon dioxide is used as refrigerant.